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June 27, 1990

TO: Minerals File

FROM: Wayne Hedberg, Permit Supervisor
Holland Shepherd, Reclamation Specialist *HLG*

RE: Final Site Inspection of Carr Fork Reclamation Site, ARCO, M/045/004,
Tooele County, Utah

Wayne Hedberg and Holland Shepherd inspected the Carr Fork Reclamation site on June 20, 1990. We were accompanied by Messrs Robert Dent, John Harden, and Virgil Anderson representing ARCO, and Mr. Joe Jarvis of JBR Consultants. The inspection was conducted to determine whether or not the 3 year old reclamation was adequate for release.

The site tour was conducted with vehicles and on foot. Most of the area was covered within the 3 hours spent on site.

The majority of the site has an excellent vegetation cover consisting of species planted by the operator. The cover density is actually higher than that of the surrounding plant communities. Surrounding plant communities have been impacted by overgrazing and residual poor quality soils degraded by years of sulfate fallout from the AS&R Smelter, which operated in the area.

The inspection included a 2 acre bare spot on top of the old landfill, which has refused to support plants. The reason is not entirely known at this point in time, though it is speculated that it is a physical property of the soil, rather than a chemical problem. For some reason, plant seedings are inhibited from establishment. However, as indicated by clumps of grass or a planted species within the bare areas, plants will persist once established. Droughty conditions over the last two years may have contributed to the lack of vegetation in these areas. These areas had been broadcast seeded and mulched last fall. Apparently, that reseeding effort was unsuccessful or it is still too soon to determine its success. Some perennial species require 1 - 2 years before complete germination.

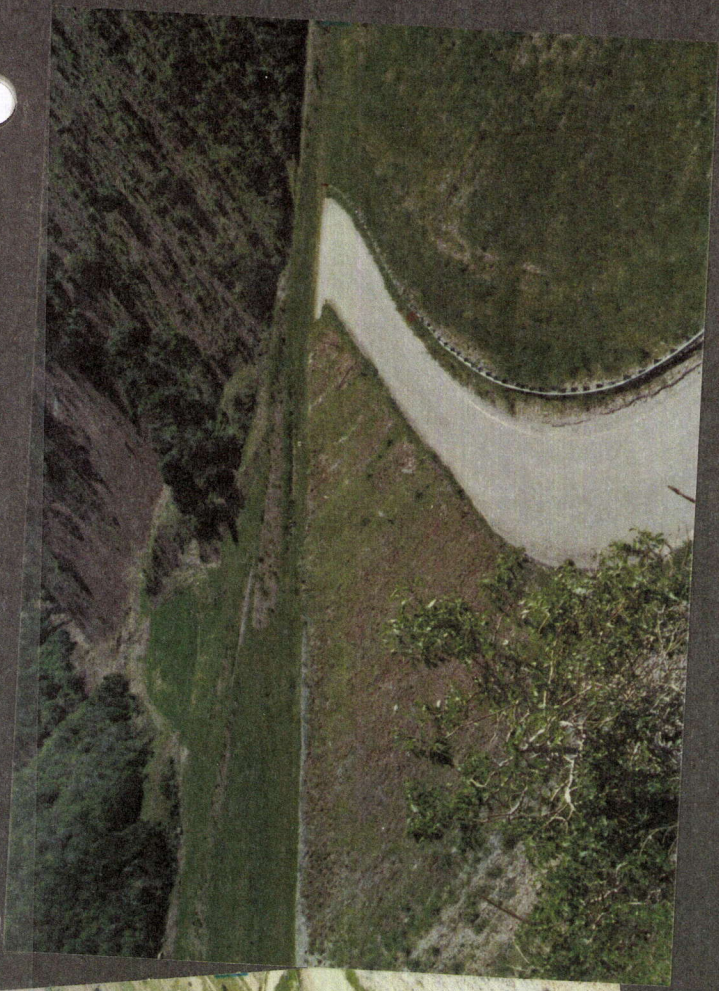
Page 2
Carr Fork Site
M/045/004
June 27, 1990

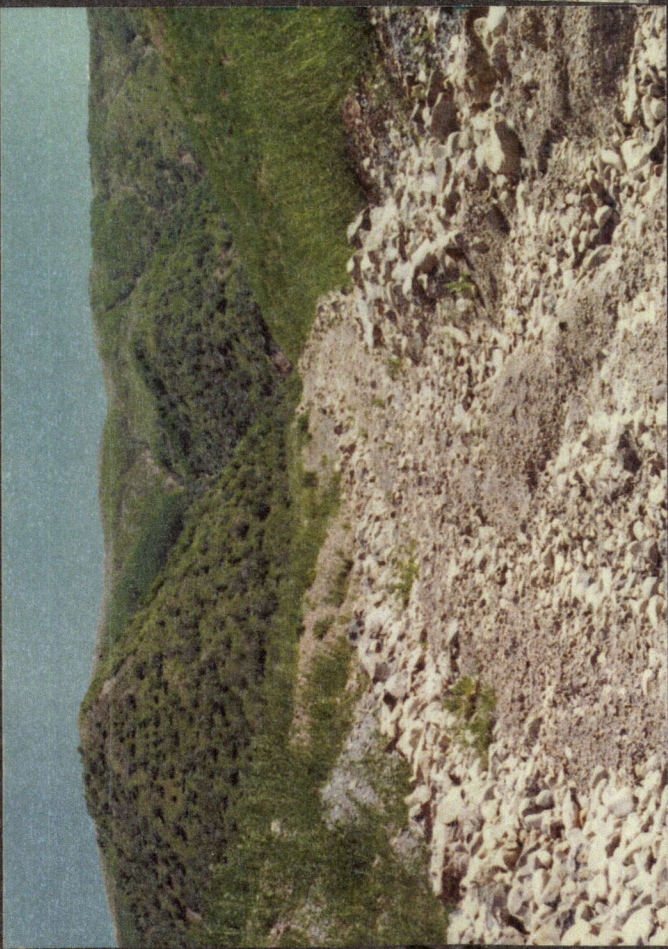
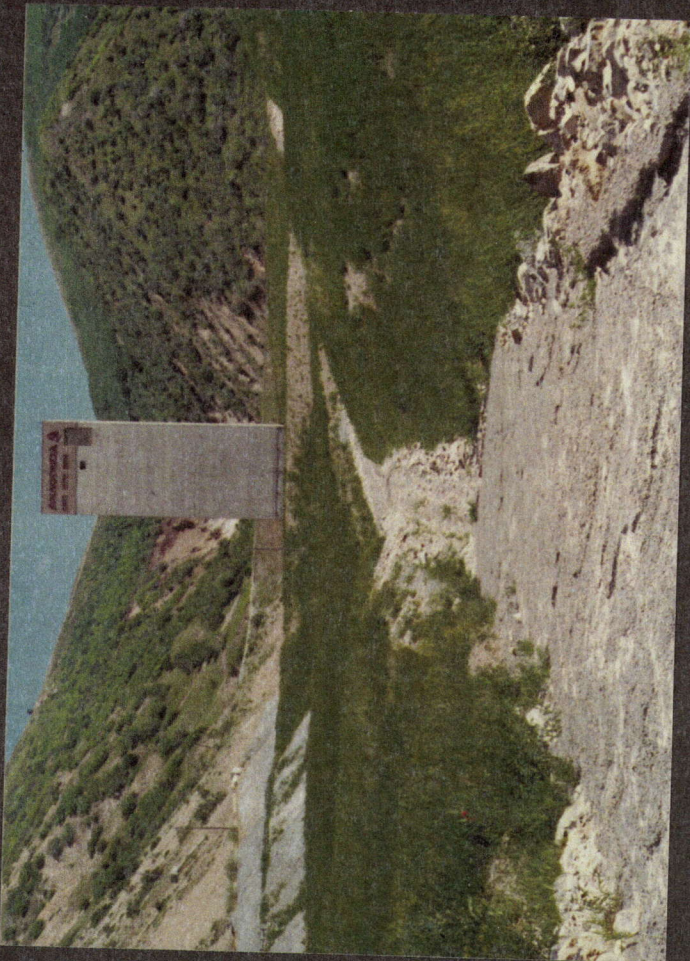
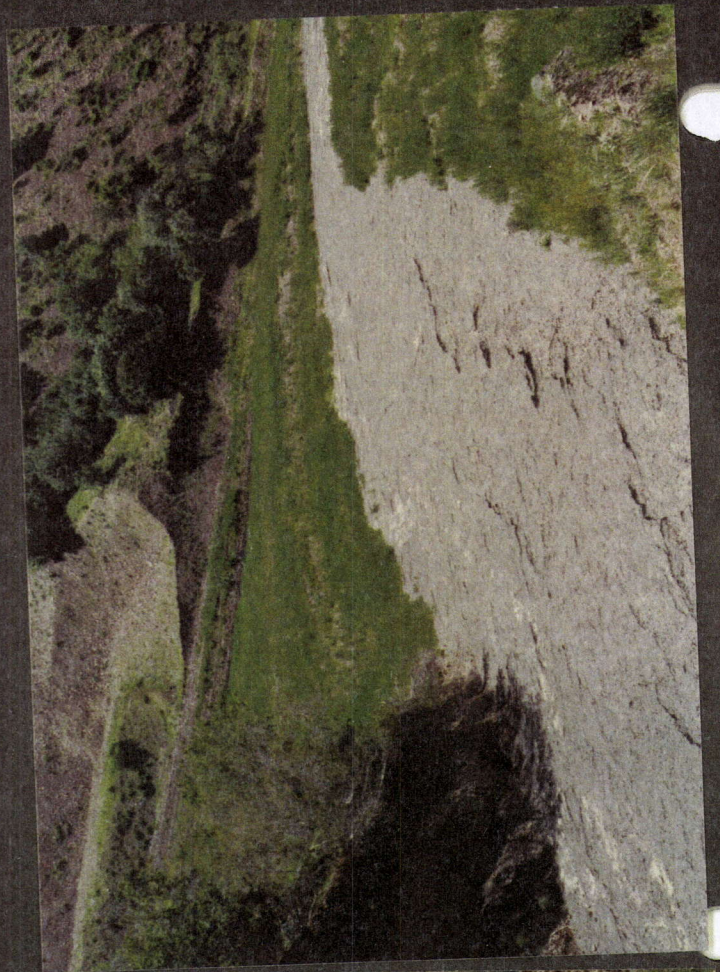
Other smaller areas of bare ground are found in the area of the old AS&R Smelter. It is speculated that these areas will not support plant growth due to low soil pH caused by sulfates found in the soil (remnants of the old smelter). The areas are small in comparison to the entire site, and do support patches of vegetation. With time, these areas will no doubt become more completely colonized. Minor erosion was evident on some of these areas. The operator indicated the possibility of coming in and redrill seeding these areas. A recent drill seeding effort (1 year old) along an old road which crosses a bare spot in the AS&R Smelter area, still maintains no vegetation. This may indicate, again, a chemical problem with the soil.

We discussed the importance of waiting longer than 3 years to determine reclamation success. The site is still in a dynamic phase. It will be several years before the plant community stabilizes. A better time frame for release would have been 5 years. This is particularly important in the arid west. However, for a site such as this, where the plant growth is so abundant and diverse, making the decision for release after 3 years is perhaps not so critical.

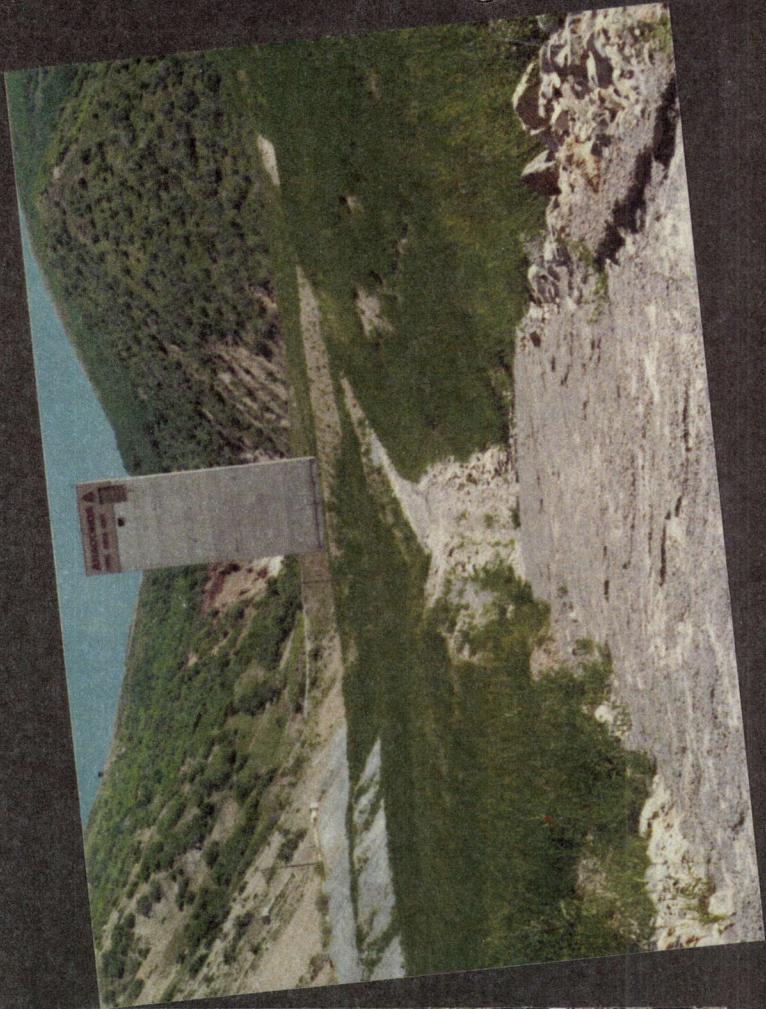
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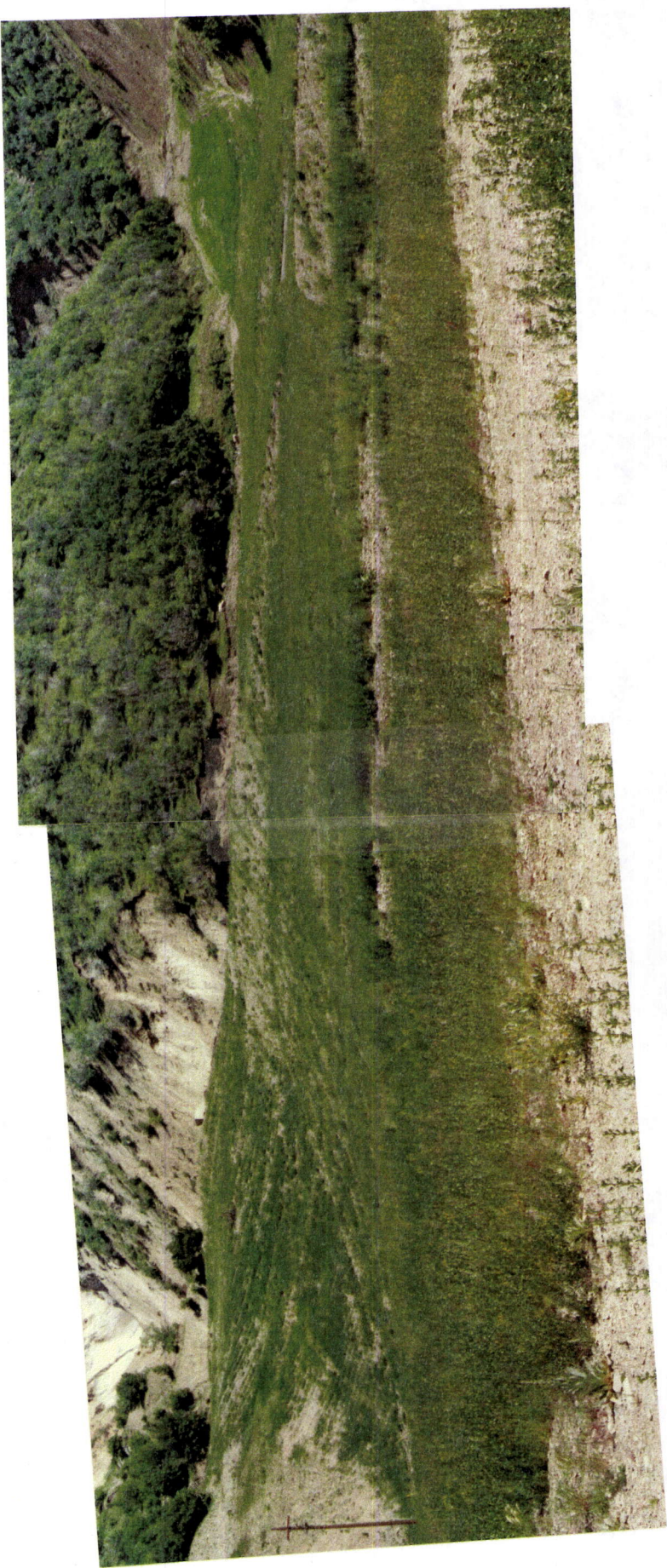
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m/045/004
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1st year Reclamation

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